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NEW YORK,	NY 10004		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/687,181	KLAUSNER ET AL.
Office Action Summary	Examiner	Art Unit
	lan N Moore	2661
The MAILING DATE of this communication ap	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin oly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>ame</u> This action is FINAL . 2b) ☐ Thi Since this application is in condition for allowed closed in accordance with the practice under	s action is non-final. ance except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1.3-17 and 19-33 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1.3-17 and 19-33 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	awn from consideration.	
Application Papers		
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the specific part of th	cepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119	•	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat* See the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received in Application (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	6) Other:	and it is a second of the seco

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DETAILED ACTION

Response to Amendment

- 1. Claim objections, on claims 32 is withdrawn since it is being amended accordingly.
- 2. Claims 2 and 18 are cancelled.
- 3. Claims 1, 17 and 33 are amended.
- 4. Claims 1, 3-17,19-33 are rejected by the same ground of rejections.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 3-11, 13-17,19-27, and 29-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Spaur (U.S. 5,732,074).

Regarding Claims 1 and 17, Spaur'074 discloses a system and a method for translating a message of a first protocol (see FIG. 2, a protocol that communicates to the vehicle devices 50a-50n) to a second protocol (see FIG. 2, Air-link/Radio protocol), comprising:

a message dispatcher (see FIG. 2, Controller/network protocol converter 30) to receive the message from the first driver before transmitting the message to the message handler, wherein the message dispatcher is adapted to the message handler from a set of one or more message handlers by consulting a database (see FIG. 2, the combined system of Data

Memory 106 and Program Memory 114; see col. 10, line 36-64, col. 8, line 1-50; note that RTOS 94 and processor 90, in the Controller 30, are adapted to perform multi-tasking management function such as control/memory/communication/ message/error managements. Thus, both RTOS 94 and processor 90 select/direct the message to handling devices such as CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 before transmission in accordance with the combined system of Data Memory 106 and Program Memory 114 (i.e. data base));

a first driver (see FIG. 2, the combined system of Controller Area Network Control Unit 124 and Controller/network protocol converter 30) adapted to receive the message of the first protocol (see FIG. 2, CAN bus 126 and vehicle devices 50a-50n) and convert the message to an independent format (see FIG. 2, TCP/IP STACK 98 converts the messages into TCP/IP format by encapsulation. Also, see col. 8, line 24-67);

a message handler (see FIG. 2, Controller/network protocol converter 30) adapted to receive said message from said first driver (see FIG. 2, Controller/network protocol converter 30 receives the messages from the Controller Area Network Control Unit 124); and

a second driver (see FIG. 2, Vehicle CDPD network modem 82) adapted to receive said message from the message handler (see FIG. 2, Phone interface 84 receiving TCP/IP messages from Controller/network protocol converter 30) and adapted to convert the message received in the independent format to the second protocol (see FIG. 2, Air link/Radio protocol; see col. 7, line 13-21); where

the first driver and the second driver are located in a vehicle (see FIG. 1, Wireless device 18 and Controller 30; see col. 6, line 3-24; note that both wireless device and

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controller are in the vehicle.) and the first protocol is a vehicular protocol (see FIG. 1, a protocol utilizing Vehicle Standard network 40); and

the second protocol is a wireless link (see FIG. 1, Wireless device 18 which couples to the air link; see FIG. 2, Air link/Radio protocol; see col. 7, line 13-21).

Regarding Claims 3 and 19, Spaur'074 discloses wherein a multiplexer (see FIG. 2, TCP/IP Stack) is to receive the message from the message handler before transmitting the message to the second driver (see col. 8, line 24-40, col. 12, line 40-69; note that it is well known in the art that TCP/IP stacks encapsulates the data in accordance with Standards. The outputted plurality of messages from various of handling devices CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128, must be multiplexed (i.e. converting from parallel inputs to a single serial output) in order to encapsulate them into TCP/IP format. Thus, multiplexing of messages from plurality of input into a serial form must be done so that the multiplexed messages can be encapsulated into the serial radio frames for wireless transmission.

Regarding Claims 4 and 20, Spaur'074 discloses wherein the multiplexer is to utilize a network configuration unit (see FIG. 2, the combined system of RTOS 94, Processor 90) for at least one of system startup, maintenance, and dynamic reconfiguration (see col. 10, line 36-64; col. 8, line 1-50; note that RTOS 94 and processor 90 perform multi-tasking management function such as control/memory/communication/ message/error managements. Thus, it is clear that TCP/IP stack must utilize the combined system of RTOS and processor unit for network management/control tasks such as system maintenance, communication, configuration/re-configuration (i.e. memory management).)

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Regarding Claims 5 and 21, Spaur'074 discloses wherein the message handler is to perform a manipulation on the message (see col. 8, line 24 to col. 9, line 56; note that Web server 102 services information related requests messages in http format. Thus, it is clear that it must manipulate/influence the message.)

Regarding Claims 6 and 22, Spaur'074 discloses wherein the manipulation includes at least one of packet translation and interaction with a computer application (see FIG. 2, Program Memory 114 and data memory 106; see col. 8, line 40 to col. 9, line 54; note that program memory 114 stores executable software applications associated with the vehicle, and the data memory stores the handling requests or commands. Thus, manipulation/influencing the message includes the web server access data memory to obtain configured data for encapsulation in the message, and the web server also links/interacts with the program memory to execute software applications.)

Regarding Claims 7 and 23, Spaur'074 discloses wherein a third driver (see FIG. 2, Remote CDPD Network Modem 76 and Modem 64) coupled to the second driver (see FIG. 2, Vehicle CDPD network modem 82 to the cellular phone 80).

Regarding Claims 8 and 24, Spaur'074 discloses wherein the multiplexer is a network multiplexer (see FIG. 2, TCP/IP stacks with the multiplex functionality is being used in CAN network and Radio/TCP/IP network. Thus, it is clear that the TCP/IP stacks must have network-multiplexing functionality.)

Regarding Claims 9 and 25, Spaur'074 discloses the database is a rules database (see FIG. 2, Data Memory 106 and Program Memory 114; see col. 8, line 40 to col. 9, line

54; note that both memory units store the commands/requests/applications/regulations for controller.)

Regarding Claims 10 and 26, Spaur'074 discloses wherein the message is transmitted from the second driver (see FIG. 2, Vehicle CDPD network modem 82 to the cellular phone 80) to a third driver (see FIG. 2, the combined system of Remote CDPD Network Modem 76 and modem 64) in the second protocol by wireless communication (see FIG. 2, Air link).

Regarding Claims 11 and 27, Spaur'074 discloses wherein the first protocol is a Controller Area Network protocol (see FIG. 2, Controller Area Network Control Unit 124).

Regarding Claims 13 and 29, Spaur'074 discloses wherein the message received by the third driver (see FIG. 2, the combined system of Remote CDPD Network Modem 76 and modem 64) is translated back to the first protocol (see FIG. 2, a protocol that communicates to the vehicle devices 50a-50n) and received by a fourth driver (see FIG. Computer terminal 60). See col. 2, line 30-50 and col. 7, line 12-45; note that the combined system of RF modem 76 and modem 64 demodulates/de-capsulates the radio frames into the IP packets. Each message inside the IP packet is associated with a specific vehicle device ID/address. The converted message received at the computer terminal includes the IP address associated with a specific on-board vehicle device ID. Thus, it is clear that the received message is converted back to original message format (i.e. first protocol) which utilizes when communicating to the vehicle devices.)

Regarding Claims 14 and 30, Spaur'074 discloses wherein a remote application in communication with the third driver is capable of receiving the message (see FIG. 2, Browser

application 72 in the computer terminal 60 receives the message via the combined system of Remote CDPD Network Modem 76 and modem 64). See col. 12, line 39-69.

Regarding Claims 15 and 31, Spaur'074 discloses wherein the remote application is capable of either passively receiving the message (see col.4, line 24-37; note that application (i.e. Web browser application in the computer terminal) receives the message from the vehicle periodically.) or initiating a transmission from the third driver back to the second driver for translation and receipt at the first driver in the first protocol (see col. 2, line 24 to col. 4, line 23; note that the computer terminal initiates the request associated with the vehicle device from the remote uplink CDPD network modem to the downlink vehicle CDPD network modem, and the message is received at the combined system of Controller Area Network Control Unit 124 and Controller/network protocol converter 30 in the protocol which communicates to the vehicle devices 50a-50n.)

Regarding claims 16 and 32, Spaur'074 discloses wherein the third driver (see FIG. 2, the combined system of Remote CDPD Network Modem 76 and modem 64) is unable to communicate with the second driver unless the third driver adheres to predefined transmission rules (see col. 2, line 25-65; note that it is well known in the art that CDPD (Cellular Digitized Packet Data) network utilizes the encrypting, encoding, and encapsulation policies/regulations according to the CDPD RF requirements before the message is sent over the air links. Thus, it is clear that the network modem 76 must utilize CDPD policies/regulation in order to transmit the message to the vehicle wireless modem 82) and transmits messages from only a predefined group of possible messages (see col. 25, line 25-

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65; note that messages are only send according to the commands/requests from the particular/specific vehicle devices within a group of plurality of vehicle devices.)

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 12, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spaur'074 in view of Wunderlich.

Regarding claims 12 and 28, Spaur'074 discloses all aspects of the claimed invention set forth in the rejection of Claim 1 and 17 as described above.

Spaur'074 does not explicitly disclose wherein the second protocol is a Bluetooth protocol.

However, the above-mentioned claimed limitations are taught by Wunderlich. In particular, Wunderlich teaches wherein the second protocol is a Bluetooth protocol (see FIG. 4, Bluetooth and BT RF; see page 9-11).

In view of this, having the system of Spaur'074 and then given the teaching of Wunderlich, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Spaur'074, by utilizing Bluetooth as a wireless air link protocol, taught by Wunderlich. The motivation to combine is to obtain the advantages/benefits taught by Wunderlich since Wunderlich states at "page 1, Abstract" that

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such modification would provide good technical performance, high market penetration, and potential for low cost solution.

Regarding claim 33, Spaur'074 discloses a system for translating a message of a Network protocol (see FIG. 2, a protocol that communicates to the vehicle devices 50a-50n) to a wireless protocol (see FIG. 2, Air-link/Radio protocol), comprising:

a first driver (see FIG. 2, the combined system of Controller Area Network Control Unit 124 and Controller/network protocol converter 30) to receive the message of the first protocol (see FIG. 2, CAN bus 126 and vehicle devices 50a-50n) and convert the message to an independent format (see FIG. 2, TCP/IP STACK 98 converts the messages into TCP/IP format by encapsulation. Also, see col. 8, line 24-67);

a message handler (see FIG. 2, Controller/network protocol converter 30) to receive said message from said first driver (see FIG. 2, Controller/network protocol converter 30 receives the messages from the Controller Area Network Control Unit 124); and

a second driver (see FIG. 2, Vehicle CDPD network modem 82) to receive said message from said message handler (see FIG. 2, Phone interface 84 receiving TCP/IP messages from Controller/network protocol converter 30) and to convert the message received in the independent format to the wireless protocol (see FIG. 2, Air link/Radio protocol; see col. 7, line 13-21);

a message dispatcher (see FIG. 2, Controller/network protocol converter 30) to receive the message from the first driver before transmitting the message to the message handler, wherein the message dispatcher is adapted to the message handler from a set of one or more message handlers by consulting a database (see FIG. 2, the combined system of Data

Memory 106 and Program Memory 114; see col. 10, line 36-64; col. 8, line 1-50; note that RTOS 94 and processor 90, in the Controller 30, are adapted to perform multi-tasking management function such as control/memory/communication/ message/error managements. Thus, both RTOS 94 and processor 90 select/direct the message to handling devices such as CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 before transmission in accordance with the combined system of Data Memory 106 and Program Memory 114 (i.e. data base).);

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a third driver (see FIG. 2, Remote CDPD Network Modem 76 and Modem 64) coupled to the second driver (see FIG. 2, Vehicle CDPD network modem 82 to the cellular phone 80); where

the first driver and the second driver are located in a vehicle (see FIG. 1, Wireless device 18 and Controller 30; see col. 6, line 3-24; note that both wireless device and controller are in the vehicle);

a multiplexer (see FIG. 2, TCP/IP Stack) is to receive the message from the message handler before transmitting the message to the second driver (see col. 8, line 24-40, col. 12, line 40-69; note that it is well known in the art that TCP/IP stacks encapsulates the data in accordance with Standards. The outputted plurality of messages from various of handling devices CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128, must be multiplexed (i.e. converting from parallel inputs to a single serial output) in order to encapsulate them into TCP/IP format. Thus, multiplexing of messages from plurality of input into a serial form must be done so that the multiplexed messages can be encapsulated into the serial radio frames for wireless transmission;

the network multiplexer is to utilize a network configuration unit (see FIG. 2, the combined system of RTOS 94, Processor 90) for at least one of system startup, maintenance, and dynamic reconfiguration (see col. 10, line 36-64; col. 8, line 1-50; note that RTOS 94 and processor 90 perform multi-tasking management function such as control/memory/communication/ message/error managements. Thus, it is clear that TCP/IP stack must utilize the combined system of RTOS and processor unit for network management/control tasks such as system maintenance, communication, configuration/reconfiguration (i.e. memory management).)

the message handler is to perform a manipulation on the message (see col. 8, line 24 to col. 9, line 56; note that Web server 102 services information related requests messages in http format. Thus, it is clear that it must manipulate/influence the message.) that includes at least one of packet translation and interaction with a computer application (see FIG. 2, Program Memory 114 and data memory 106; see col. 8, line 40 to col. 9, line 54; note that program memory 114 stores executable software applications associated with the vehicle, and the data memory stores the handling requests or commands. Thus, manipulation/influencing the message includes the web server access data memory to obtain configured data for encapsulation in the message, and the web server also links/interacts with the program memory to execute software applications.);

the message is transmitted from the second driver (see FIG. 2, Vehicle CDPD network modern 82 to the cellular phone 80) to a third driver (see FIG. 2, the combined system of Remote CDPD Network Modern 76 and modern 64) in the wireless protocol by wireless communication (see FIG. 2, Air link).

a remote application is capable of either passively receiving the message (see col.4, line 24-37; note that the application station (i.e. web browser application in the computer terminal) receives the message from the vehicle periodically.) or initiating a transmission from the third driver back to the second driver for translation and receipt at the first driver in the Network protocol (see col. 2, line 24 to col. 4, line 23; note that the computer terminal initiates the request associated with the vehicle device from the remote uplink CDPD network modem to the downlink vehicle CDPD network modem, and the message is received at the combined system of Controller Area Network Control Unit 124 and Controller/network protocol converter 30 in the protocol which communicates to the vehicle devices 50a-50n.)

Spaur'074 does not explicitly disclose network protocol is a Controller Area Network Protocol, and wireless protocol is a Bluetooth protocol.

However, the above-mentioned claimed limitations are taught by Wunderlich. In particular, Wunderlich teaches the network protocol is a Controller Area Network Protocol (see FIG. 4, CAN protocol), and wireless protocol is a Bluetooth protocol (see FIG. 4, Bluetooth and BT RF; see page 9-11).

In view of this, having the system of Spaur'074 and then given the teaching of Wunderlich, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Spaur'074, by utilizing Bluetooth as a wireless air link protocol to convert automotive CAN protocol, taught by Wunderlich. The motivation to combine is to obtain the advantages/benefits taught by Wunderlich since Wunderlich states at "page 1, Abstract" that such modification would provide good technical performance, high market penetration, and potential for low cost solution.

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Response to Arguments

9. Applicant's arguments filed 8-9-2004 have been fully considered but they are not persuasive.

Regarding claims 1,17 and 33, the applicant argued that, "... Spaur does not discuss or even suggest....receiving a message from a first driver by a message dispatcher before transmitting the message to a message handler...the message dispatcher selects the message handler from a set of one or more message handlers by consulting a database..." in page 8, para 7; page 9, para 1-3; page 10, para 1, 3; page 11, para 5.

In response to applicant's argument, the examiner respectfully disagrees that Spaur does not discuss or even suggest....receiving a message from a first driver by a message dispatcher before transmitting the message to a message handler...the message dispatcher selects the message handler from a set of one or more message handlers by consulting a database.

Spaur discloses a message dispatcher (see FIG. 2, Controller/network protocol converter 30) to receive the message from the first driver before transmitting the message to the message handler, wherein the message dispatcher is adapted to the message handler from a set of one or more message handlers by consulting a database (see FIG. 2, the combined system of Data Memory 106 and Program Memory 114; see col. 10, line 36-64, col. 8, line 1-50; note that RTOS 94 and processor 90, in the Controller 30, are adapted to perform multi-tasking management function such as control/memory/communication/
message/error managements. Thus, both RTOS 94 and processor 90 select/direct the

message to handling devices such as CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 before transmission in accordance with the combined system of Data Memory 106 and Program Memory 114 (i.e. data base)).

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As noted above and in the previous office action, Controller/network protocol converter 30 performs multi-tasking management functions. Both RTOS 94 and processor 90 within the controller 30 dispatches/sends/transmits a message, thus it is clear that controller 30 (i.e. RTOS 94 and processor 90) is the message dispatcher. CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 within the controller 30 handles/process a message, thus it is clear that the controller 30 (i.e. CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128) are the message handlers. Thus, it is clear that after receiving a message from controller area network unit 124 (i.e. a first driver), RTOS 94 and processor 90 of the controller 30 sends the message to the message to CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 in order to handle/process the message.

As noted above and in the previous office action, examiner asserts a database as the combined system of data memory 106 and program memory 114, see FIG. 2, since it stores the configuration information data, and the data that is useful for commands and requests (see col. 8, lines 45-60). Examiner asserts a set of one or more handlers as CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and device drivers 128. The RTOS 94 performs task management, intertask communication, memory management, message management, timing, I/O management, and error management, and RTOS works with the application software in a multi-task scheme to respond to request for vehicle related

information including data. The processor/controller processing the various elements in accordance the intelligent from the memory is well known in the art. For example, in personal computer, CPU processes the elements (i.e. mouse, keyboard, printer, or any devices) based upon stored driver information or software regarding these elements (i.e. mouse, keyboard, printer, or any devices). CPU cannot possibly selects, enables and processes these elements without the stored/memorized intelligent stored in the memory. Thus, it is clear the RTOS 94 must consult/retrieve/process the combined system data memory 106 and program memory 114 to obtain the knowledge/intelligent with regards to what/where to dispatch/send/transmit and how to dispatch/send/transmit the message by performing intertask communication, memory management, message management; see col. 13, lines 1-35. Upon determining what/where/how process needs to perform from the combined memory, RTOS selects the one or more of the message handling/processing elements such as CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 in order to process the request or command or data message. The RTOS selects web server 102 to process http format (see col. 8, lines 55-60; see col. 12, lines 60-65; see col. 13, lines 19-28), and/or selects/enables CGI-bin 110 to applied the message (see col. 13, lines 6-10). Thus, it is clear that RTOS selects/processes/enables from a set of one or more CGI-BIN 110, Webserver 102, Controller Area Network unit 124, and/or device drivers 128 by consulting/retrieving/processing the combined memory.

Note that applicant is <u>neither</u> claiming any <u>specific</u> format, structure or significant of the message dispatcher or handlers or database, <u>nor</u> how they are different from any typical processor, memory, and elements, and the method of the processor

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selecting/enabling/processing the elements based upon memory. Thus, examiner believes that Spaur still discloses the claimed invention for at least the reasons discussed above.

For claims 12,28, and 33, the applicant argued that, "... examiner must show that there is some suggestion or motivation..." in page 11, paragraph 3.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine, which also disclosed by previous office action, is to obtain the advantages/benefits taught by Wunderlich since Wunderlich states at "page 1, Abstract" that such modification would provide good technical performance, high market penetration, and potential for low cost solution.

In view of the above, the examiner respectfully disagrees with applicant's argument and believes that the combination of references as set forth in the 103 rejections is proper, thus, Claims 12, 28, 33 are obvious over Spaur in view of Wunderlich for at least the reasons discussed above.

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the 11. examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM 11/8/04

PRIMARY EXAMINER

my 11/9/04